

REMARKS/ARGUMENTS

Claims 1-14 are pending. No amendment is made to any of the pending claims.

Reconsideration of the present application is respectfully solicited in view of the following remarks.

Claims are allowable under 35 U.S.C. § 103(a)

Applicants gratefully note that in response to their previously submitted response, the Examiner has withdrawn the rejection of claims 1-14 under 35 U.S.C. §103(a) as being unpatentable over Sandstrom (US Patent Application Publication No. 2003/0089438) in view of Vasseur (WO 02/088238).

Nevertheless, the Examiner rejects claims 1-14 on a new ground. Specifically, the Examiner rejects claims 1-14 under 35 U.S.C. §103(a) as being unpatentable over Vasseur in view of Sandstrom. Applicants respectfully traverse. (For convenience, the citations below for Vasseur are from an English language equivalent (US 2004/0127617).)

Independent claim 1 recites a passenger car tire comprising a tread. The tread comprises a rubber composition, which comprises a diene elastomer, silica in an amount of greater than 50 phr, a coupling agent, and a plasticising agent. **The diene elastomer comprises more than 30 phr of butyl rubber.** The plasticising agent comprises an unsaturated (C₁₂-C₂₂) fatty acid triester of glycerol.

According to the Examiner, the primary reference Vasseur discloses every limitation of claim 1 other than a diene elastomer comprising more than 30 phr of butyl rubber; the secondary reference Sandstrom, on the other hand, discloses the use of a diene elastomer comprising more than 30 phr of butyl rubber for creating a shock absorbing effect. Therefore, the Examiner concludes that it would have been obvious for a person of ordinary skill in the art to use the

diene elastomer as disclosed in Sandstrom to create a shock absorbing effect. Applicants disagree.

First, using butyl rubbers as suggested by the Examiner would violate Vasseur's explicit requirement for **highly unsaturated** diene elastomers. Vasseur is directed to tires of a passenger vehicle, which is apparently designed for running on regular roads at a very high speed. *See* the abstract and paragraph 0002. Vasseur discloses a rubber composition for tire tread, which is based on at least one diene elastomer. Vasseur emphasizes that the diene elastomer used in its composition should be "**highly unsaturated**", i.e., the diene elastomer has a high content (>50%) of units of diene origin. *See* paragraph 0044. On the other hand, it is well known that butyl rubbers disclosed in Sandstrom belong to the class of **essentially saturated** diene elastomers, having a very low content (less than 15%) of units of diene origin. *See* paragraph 0030 of the present application. Accordingly, using butyl rubbers, which are **essentially saturated** diene elastomers, as suggested by the Examiner, would certainly not satisfy Vasseur's requirement for **highly unsaturated** diene elastomers. Therefore, a person of ordinary skill in the art would not replace the highly unsaturated diene elastomers in Vasseur's composition with the essentially saturated diene elastomers of Sandstrom.

Second, because Sandstrom discloses the use of butyl rubbers would lead to a low rebound value, which is not desired for a passenger-type vehicle of Vasseur, a person of ordinary skill in the art would not replace the diene elastomers of Vasseur with butyl rubbers, as suggested by the Examiner.

As explained at paragraphs 0002 and 0003 of Vasseur, it is desirable that the rubber composition for a passenger-type vehicle has a low hysteresis (i.e., **high rebound value**) in order to reach a low rolling resistance. *See* also paragraphs 0002 and 0003 of the present application.

On the other hand, Sandstrom, which is directed to various **agricultural vehicles**, emphasizes the importance of a **low rebound value** of a tire composition to ensure a certain degree of shock absorbency. At paragraphs 0006-0008, Sandstrom explains the following:

[0006] Also, it can be readily visualized that shocks originating by the tire traveling over **irregularities of the ground** are readily transmitted to the wheel, and hence to the axle, of the associated vehicle and thereby to transmit the associated shock to the vehicle which, in turn, can result in a discomfort to the individual driving the vehicle.

[0007] In such circumstance, such **agricultural vehicles** typically rely upon the **shock absorbency** of the raised lug configuration of the tire tread to provide a degree of shock absorbency for the comfort of vehicle operator.

[0008] Accordingly, it remains desirable, in many circumstances, to **increase the shock absorbency** for such vehicles having a tread of such spaced apart, raised lug configuration.

(Emphasis added.)

Sandstrom repeatedly emphasizes the importance of a very high hysteresis (i.e., **very low rebound value**, *see* Table 4) of tire lugs and treads to create a shock absorbing effect for agricultural tires. *See* paragraphs 0020-0022 and 0055-0056. For example, at paragraph 0020, Sandstrom states:

A significant aspect of the invention is the utilization of the prescribed **shock absorbing rubbers for the significantly raised tread lugs as compared to diene-based rubbers of significantly reduced shock absorbing ability**, particularly where the substantial tread lug rubber composition is required to **have a rebound value (23⁰C) of less than 25** and a Shore A hardness (23⁰C) of greater than 60.

(Emphasis added.)

Accordingly, based on Sandstrom, replacing the unsaturated diene polymers in Vasseur's tire tread composition with the butyl rubbers of Sandstrom, as suggested by the Examiner, would lead to a very low rebound value, which is undesirable for a passenger-type vehicle. This further indicates that a person of ordinary skill in the art would not modify Vasseur's composition, as proposed by the Examiner, to arrive at the present invention.

Additionally, Vasseur's passenger-type vehicle, which is designed to run on a **regular road**, does not have the same concern or demand for increased shock absorbency, as does an agricultural vehicle disclosed in Sandstrom, which runs on **irregular ground**. Neither Vasseur nor Sandstrom suggests or even implies that there is a need to increase the shock absorbency of Vasseur's passenger-type vehicle. Therefore, there is no apparent reason for a person of ordinary skill in the art to replace the unsaturated diene elastomers of Vasseur with butyl rubbers to increase the shock absorbency of a tire composition and to violate Vasseur's explicit requirements for unsaturated diene elastomers and a high rebound value.

For reasons expressed above, modifying Vasseur in view of Sandstrom as suggested by the Examiner to create the arrangement of present claim 1 is not obvious under 35 U.S.C. §103(a). For at least the same reasons, claims 2-14, each of which depends from claim 1, are also not obvious under 35 U.S.C. §103(a) over Vasseur in view of Sandstrom. Withdrawal of the rejections of claims 1-14 is, therefore, respectfully requested.

Applicants believe that the present application is in condition for allowance. Early and favorable consideration is earnestly requested.

It is believed that no other fees or charges are required at this time in connection with the present application. However, if any fees or charges are required at this time, they may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,
COHEN PONTANI LIEBERMAN & PAVANE LLP

By Thomas Langer
Thomas Langer
Reg. No. 27,264
551 Fifth Avenue, Suite 1210
New York, New York 10176
(212) 687-2770

Dated: March 2, 2009